

Notice of Allowability

Application No.

09/992,614

Examiner

Jay P. Patel

Applicant(s)

ROTSTEIN ET AL.

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11/06/2001.
2. ☒ The allowed claim(s) is/are 1-15.
3. ☒ The drawings filed on 11/06/2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 11/06/2001
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

KENNETH VANDERPUYE
Principal Examiner

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Anthony Sitko on 2-8-05.

The application has been amended as follows:

- a. Claim 1, page 9, line 13, "have" has been replaced with "having"
- b. Claim 2, page 9, line 18, "unit" has been replaced with "station"
- c. Claim 8, page 10, line 13, "sector is" has been replaced with "sectors having"
- d. Claim 15, page 12, line 5, "unit" has been replaced with "station"

REASONS FOR ALLOWANCE

2. Claims 1-15 are allowed.
3. The following is an examiner's statement of reasons for allowance:

Claim 1 is allowable over the prior art of record since the cite reference taken individually or in combination fail to particularly disclose detecting which of at least the other sectors in the sector grouping that includes the particular sector area having one or more reverse link channel multipath links between that at least one

communication unit and the base station. It is noted that the closest prior art, Wee (U.S. Patent No. 6272122 B1) discloses an illustration of a reuse of a pilot PN sequence phase offset (Figure 6 and column 8, lines 35-50). Wee also discloses that a single cluster is divided into sub-clusters wherein, each base station in the sub-cluster has plurality of sectors (column 2, lines 63-67 and column 3, lines 1-2). In addition, Wee also discloses that a pilot signal allows a mobile station to acquire timing phase synchronization and provides identification information for identifying a sector (column 5, lines 1-5). Wee also discloses that the mobile station communicates with a base station using a forward and reverse link channels, and process PN codes transmitted from the other base stations for possible interfering pilots (column 6, lines 52-57). However, Wee fails to disclose or render obvious the above underlined limitations as claimed.

Claim 15 is allowable over the prior art of record since the cited references taken individually or in combination fail to particularly disclose **a forward link transmitter; and a decision logic that is connected between the plurality of searching devices and the forward link transmitter and is configured to determine which sectors having shared PN offsets are in a communication link with the at least one communication unit and to direct the forward link transmitter to transmit information to the communication unit via all sectors having shared PN offsets that also are in a communication link with the at least one communication unit.** It is noted that the closest prior art, Blakeney et al. (U.S. Patent No. 5267261) shows a mobile cellular telephone that includes an antenna, an analog and digital receiver and a

searcher receiver configured to work in a CDMA system (figure 2). The digital receiver functions to correlate the input samples with proper PN sequences (column 13, lines 11-12) and the searcher receiver continuously scans the time domain for other multi-path pilot signals from the same base station and for other base station transmitted pilot signals (column 13, lines 36-41). However, Blakeney et al. fail to disclose or render obvious the above underlined limitations as claimed.

CONCLUSION

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

-Wee (U.S. Patent 6272122 B1) discloses a method for assigning a pilot PN offset to a base station.

-Blakeney et al. (U.S. Patent 5267261) disclose a method to improved handoff in a CDMA system.

-Faraque (U.S. Patent 5883889) discloses a method for directional PN offset assignment in a CDMA system.

-Chang (U.S. Patent 6049564) discloses a method and apparatus for configuring PN offsets for a non-uniform CDMA cellular system.

-Fortuna (U.S. Patent 6778833 B1) discloses a method for allocating identifiers in a cellular wireless network.

-Soliman (U.S. Patent 6433739 B1) discloses a method and apparatus for synchronizing base stations using remote synchronizing stations.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jay P. Patel whose telephone number is (571) 272-3086. The examiner can normally be reached on M-F 9:00 am - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ken Vanderpuye can be reached on (571) 272-3078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jpp 2/8/2005
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KENNETH VANDERPUYE
PRIMARY EXAMINER